



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,901	01/23/2004	Toshiyuki Sasaki	MM4659	7778

7590 07/22/2005

WYATT, GERBER, MELLER & O ROURKE, L.L.P.  
99 PARK AVENUE  
NEW YORK, NY 10016

EXAMINER

COLILLA, DANIEL JAMES

ART UNIT PAPER NUMBER

2854

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/763,901

Applicant(s)

SASAKI ET AL.

Examiner

Daniel J. Colilla

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-16 is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9 and 13-23 is/are rejected.
- 7) ☒ Claim(s) 7,10-12,24 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/23/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Printing Apparatus and Method For Printing on Two Printing Mediums With Substantially Perpendicular Transportation Paths.

### ***Claim Objections***

2. Claims 6-7 are objected to because of the following informalities:

In claim 6, line 2, "the discharge side" has no antecedent basis in the claims.

In claim 7, "the slip form" has no proper antecedent basis. Previously applicant has recited a first and second slip form. It is not clear which slip form applicant is referring to in this claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

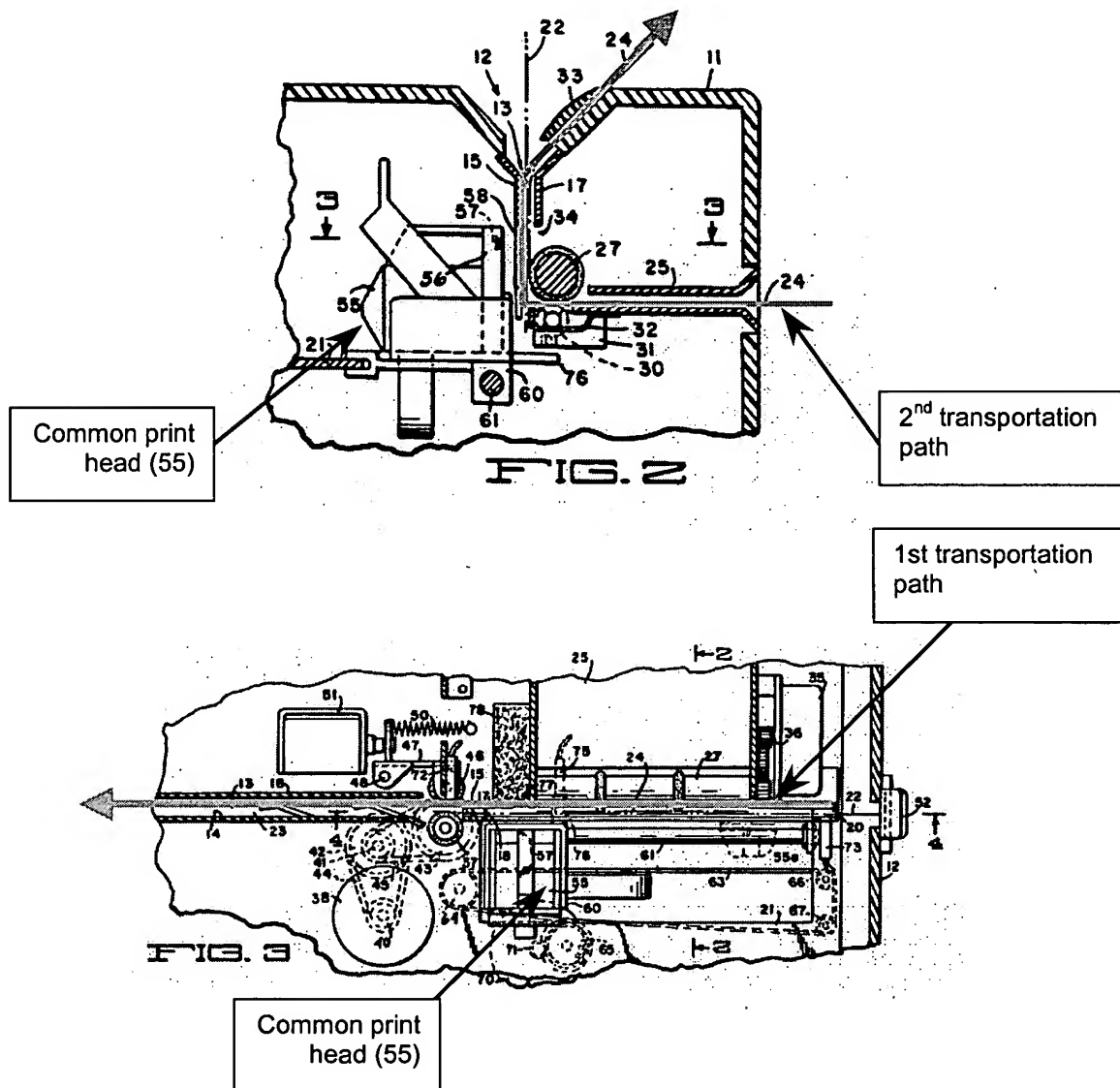
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 8, 17, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Clary (US 5,080,513).

Art Unit: 2854

With respect to claim 1, Clary discloses a first transportation path for transporting a first print medium 22 and a second transportation path for transporting a second print medium 24 as shown below in the Figures taken from Figures 2 and 3 of Clary:



The common print head 55 prints on both the first print medium 22 and the second print medium 24 at the printing area which is where the first and second transportation paths intersect at a substantially perpendicular angle.

Art Unit: 2854

With respect to claim 8, the first print medium 22 is a slip form and the second print medium 24 is a roll paper.

With respect to claim 17, Clary discloses a printing apparatus including a transportation mechanism 37,46 for transporting a slip form 22 along a first transportation path (see above Figures). Clary further discloses a print head 55 for printing the slip form 22 in a printing area disposed along the first transportation path as shown above and a carriage 60 for carrying the print head 55 parallel to the transportation direction of the slip form 22 along rod 61 as shown above.

With respect to claim 20, Clary discloses that the form feed motor 38 is deenergized (thus the form is held stationary) while the printer head motor 70 is energized causing the print head to advance to the right (Clary, col. 4, lines 20-25). As shown in the above Figures the print head 55 moves along rod 61 in a direction parallel to the slip form 22 transportation direction.

With respect to claim 22, as shown above in the Figure taken from Figure 2 of Clary, Clary discloses a second transportation path substantially perpendicular to the first transportation path that is used for transporting roll paper. The print head 55 prints on the roll paper.

5. Claims 1, 5-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fowlkes (US 6,361,163).

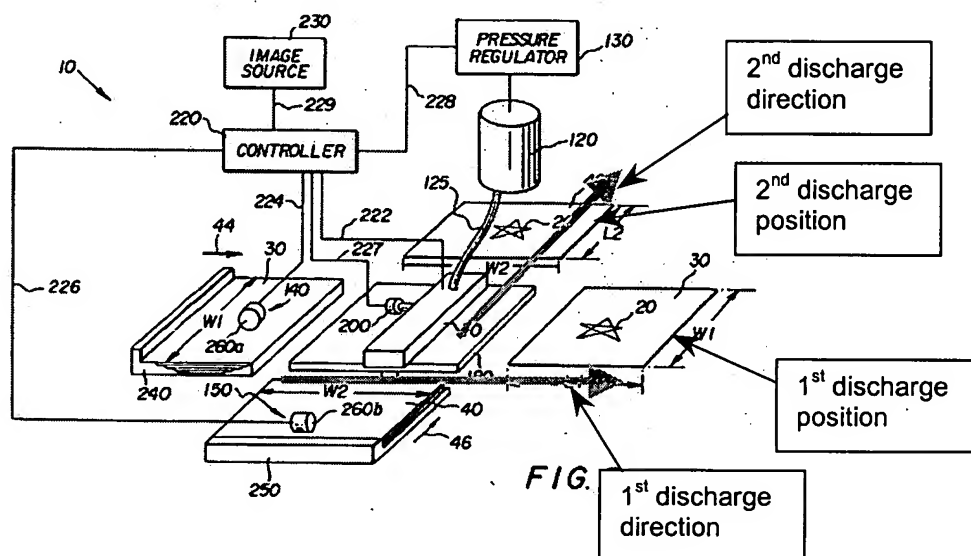
With respect to claim 1, Figure 8 of Fowlkes shows a first print medium 30 that is transported along a first transportation path and a second print medium 40 that is transported along a second transportation path such that the first and second transportation paths are

perpendicular and intersect at a printing area in which a common printhead 70 prints on the print media.

With respect to claim 5, the first and second print mediums are in the form of a paper slip as shown in Figure 8 of Fowlkes.

With respect to claim 6, this claim recites functional limitations of how the claimed structure is to be used. The structure disclosed by Fowlkes is capable of receiving a slip inserted from the discharge side of the second transportation path and then ejecting the slip from the discharge side of the second transportation path.

With respect to claim 9, although not shown, Fowlkes must inherently disclose a first and second discharge means in order to be able to move the first and second mediums, 30 and 40 respectively to the discharge positions shown in the below Figure taken from Figure 8 of Fowlkes:



The first discharge means ejects the first print medium 30 to in a first transportation direction along the first transportation path as shown above. The second discharge means has the

Art Unit: 2854

capability to eject the first print medium in a second transportation direction perpendicular to the first transportation path.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clary (US 5,080,513) as applied to claim 17 above, and further in view of Brewington et al. (US 6,447,182).

Clary discloses the claimed printing apparatus except for the ability for the carriage to move between the printing area and a retracted position. However, Brewington et al. discloses a printing apparatus in which the printhead 17 can be retracted from a printing area to a cleaning position at 76 as shown in Figure 1 of Brewington et al. It would have been obvious to combine the teaching of Brewington et al. with the printing apparatus disclosed by Clary for the advantage of a cleaning device to maintain the print head in good operating order.

8. Claims 2-4, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clary (US 5,080,513) as applied to claims 1, 17 and 20 above, and further in view of Shell et al. (US 6,103,985).

With respect to claims 2-3, Clary discloses the claimed printing apparatus as mentioned above with respect to claim 1 except for the U-shaped first transportation path. However, Shell et al. teaches a printing apparatus for printing on a print medium that has a U-shaped transportation path. It would have been obvious to combine the teaching of Shell et al. with the printing apparatus disclosed by Clary for the advantage of the MICR head 3, disposed on side of the U-shaped transportation path, which can read characters off of the printing medium to verify the authenticity of the printing medium.

With respect to claims 4 and 18, Shell et al. discloses a scanner 11 disposed in the U-shaped transportation path for capturing an image of the first print medium.

With respect to claim 21, Clary discloses the claimed printing apparatus, as mentioned above with respect to claims 17 and 20 except for the magnetic ink character reader or scanner. However, Shell et al. discloses a printing apparatus including a magnetic ink reader 3 and print head 8 as shown in Figure 2 of Shell et al. The print head has the capability to print any information including read results from the MICR or scanner. It would have been obvious to combine the teaching of Shell et al. with the printing apparatus disclosed by Clary for the advantage of verifying the slips authenticity based on the magnetic ink characters on the slip.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shell et al. (US 6,103,985) in view of Omura (2001/0016137).

Shell et al. discloses the claimed method for printing except that it is not known to the examiner if the printing step prints according to the magnetic ink character data read from the slip. Figure 2 of Shell et al. discloses transporting a slip along a U-shaped first transportation



Art Unit: 2854

path, reading magnetic ink characters with magnetic read head 3 and printing to the slip with print head 9. Omura teaches reading a slip P with magnetic ink character read head 3 and printing on the slip P according to the read information (Omura, paragraph [0047], lines 10-19). It would have been obvious to combine the teaching of Omura with the printing method disclosed by Shell et al. for the advantage of the additional capability for printing on receipt type record R.

***Allowable Subject Matter***

10. Claims 13-16 are allowed.
11. Claim 7 is objected to as being dependent upon a rejected base claim and for containing the above mentioned informalities, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and rewritten to overcome the above mentioned informalities.
12. Claims 10-12 and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. The following is a statement of reasons for the indication of allowable subject matter:

Claim 7 has been indicated as containing allowable subject matter primarily for the first and second print mediums being paper slip forms and for the discharge device for printing multiple lines while conveying the slip form to the discharge side of the second transportation path.

Claims 10 and 12 have been indicated as containing allowable subject matter primarily for the magnetic ink character reader or scanner wherein the first print medium is ejected from the first discharge means or second discharge means according to the read results from the reader or scanner.

Claim 11 has been indicated as containing allowable subject matter primarily for the intervening print head that prints multiple lines to the first print medium while transporting the first print medium in the second transportation direction.

Claims 13-16 have been allowed primarily for the roll paper compartment and second transportation path disposed inside a U-shaped transportation path.

Claims 24-25 have been allowed primarily for the step of transporting and ejecting the slip form along a second transportation path substantially perpendicular to the first transportation path.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dyma et al. and Piazza are cited to show other printers with U-shaped transportation paths. Clary (US 5,294,204) and Hasegawa are cited to show other examples of a printer with two intersecting transportation paths.

Art Unit: 2854

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Colilla whose telephone number is 571-272-2157. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 20, 2005



Daniel J. Colilla  
Primary Examiner  
Art Unit 2854